```
=> d his full

     (FILE 'HOME' ENTERED AT 08:52:16 ON 06 MAY 2005)

     FILE 'HCAPLUS' ENTERED AT 08:54:56 ON 06 MAY 2005
L1            1 SEA ABB=ON  PLU=ON  US20020016451/PN

     FILE 'REGISTRY' ENTERED AT 08:55:34 ON 06 MAY 2005

     FILE 'HCAPLUS' ENTERED AT 08:55:36 ON 06 MAY 2005
L2              TRA L1 1- RN :       30 TERMS

     FILE 'REGISTRY' ENTERED AT 08:55:36 ON 06 MAY 2005
L3           30 SEA ABB=ON  PLU=ON  L2

     FILE 'WPIX' ENTERED AT 08:55:37 ON 06 MAY 2005
L4            1 SEA ABB=ON  PLU=ON  US20020016451/PN

=> b hcap
FILE 'HCAPLUS' ENTERED AT 08:56:13 ON 06 MAY 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 6 May 2005  VOL 142 ISS 20
FILE LAST UPDATED: 5 May 2005  (20050505/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d all l1

L1   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   1999:708779  HCAPLUS
DN   131:351620
ED   Entered STN:  05 Nov 1999
TI   Solution phase biopolymer synthesis of oligodeoxyribonucleotides using
     multifunctional liquid phase carriers
IN   Koster, Hubert; Worl, Ralf
PA   USA
SO   PCT Int. Appl., 88 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  C07H021-00
     ICS  C07K001-00
CC   33-10 (Carbohydrates)
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     ----------          ----   --------    -------------------      --------
PI   WO 9955718          A2     19991104    WO 1999-US8939           19990426
     WO 9955718          A3     19991216
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU,
```

```
            TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002016451        A1    20020207    US 1998-67337          19980427 <--
     AU 9936643           A1    19991116    AU 1999-36643          19990426
     EP 1073668           A2    20010207    EP 1999-918819         19990426
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     US 2002007048        A1    20020117    US 2000-484484         20000118
PRAI US 1998-67337        A     19980427
     WO 1999-US8939       W     19990426
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
 ---------------  -----  ----------------------------------------------
 WO 9955718       ICM    C07H021-00
                  ICS    C07K001-00
 WO 9955718       ECLA   C07C025/18; C07C043/225; C07C069/708; C07C069/76;
                         C07C211/14; C07C233/78; C07C235/10; C07C255/16;
                         C07H021/00C4; C07H021/00F; C07K001/02; C07K014/00B1
 US 2002016451    NCL    536/025.300
                  ECLA   C07C025/18; C07C043/225; C07C069/708; C07C069/76;
                         C07C211/14; C07C233/78; C07C235/10; C07C255/16;
                         C07H021/00C4; C07H021/00F; C07K001/02; C07K014/00B1 <--
 US 2002007048    NCL    536/004.100; 536/018.400; 536/025.300; 536/018.600
                  ECLA   C07C025/18; C07C255/16; C07H021/00C4; C07H021/00F;
                         C07K001/02; C07K014/00B1; C07C043/225; C07C069/708;
                         C07C069/76; C07C211/14; C07C233/78; C07C235/10
AB   Multifunctional liquid phase carriers (LPCs) and methods of using LPCs for
     the preparation of biopolymers are provided.  The LPCs are highly sym. compds.
     that possess more than two points of attachment for biopolymer synthesis.
     The LPCs have the formula Sp(X1)n, where Sp is a highly sym. moiety such
     that all X1 groups are equivalent  X1 is a functional group that is suitable
     for biopolymer synthesis, including OH, SH, NH2, COOH and the like.
     Biopolymers that may be produced using the methods provided include
     oligonucleotides, peptides, protein nucleic acids (PNAs) and
     oligosaccharides.  Analogs of the biopolymers may also be prepared using the
     methods.  Thus decamer d(GACCGGCAGT) was prepared using multifunctional liquid
     phase carriers.
ST   peptide nucleic acid soln phase synthesis; oligodeoxyribonucleotide soln
     phase synthesis liq phase carrier
IT   Oligodeoxyribonucleotides
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (solution phase biopolymer synthesis of oligodeoxyribonucleotides using
        multifunctional liquid phase carriers)
IT   115-77-5, reactions  2672-58-4  16687-60-8  107905-15-7  247916-13-8
     247916-14-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (solution phase biopolymer synthesis of oligodeoxyribonucleotides using
        multifunctional liquid phase carriers)
IT   2465-91-0P  132491-87-3P  146669-14-9P  221898-80-2P  221898-84-6P
     221898-85-7P  221898-86-8P  222306-76-5P  250641-33-9P  250641-35-1P
     250641-36-2P  250641-37-3P  250641-38-4P  250641-39-5P  250641-41-9P
     250641-42-0P  250641-47-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (solution phase biopolymer synthesis of oligodeoxyribonucleotides using
        multifunctional liquid phase carriers)
IT   106678-62-0P  221898-81-3P  221898-82-4P  221898-83-5P  249268-52-8P
     250641-44-2P  250641-45-3P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (solution phase biopolymer synthesis of oligodeoxyribonucleotides using
        multifunctional liquid phase carriers)


=> b wpix
FILE 'WPIX' ENTERED AT 08:56:23 ON 06 MAY 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED:          4 MAY 2005      <20050504/UP>
```

```
MOST RECENT DERWENT UPDATE:     200528        <200528/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
    http://thomsonderwent.com/coverage/latestupdates/          <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://thomsonderwent.com/support/userguides/              <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
    DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
    FIRST VIEW - FILE WPIFV.
    FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv  <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
    PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/
    FOR DETAILS. <<<

=> d all l4

L4   ANSWER 1 OF 1  WPIX  COPYRIGHT 2005 THE THOMSON CORP on STN
AN   2000-038633 [03]   WPIX
DNC  C2000-009856
TI   Liquid phase carriers for synthesis of biopolymers in solution,
     particularly of proteins and nucleic acids.
DC   B04 D16
IN   KOESTER, H; WOERL, R; KOSTER, H; WORL, R
PA   (KOES-I) KOESTER H; (KOST-I) KOSTER H; (WORL-I) WORL R
CYC  86
PI   WO 9955718      A2 19991104 (200003)* EN   87    C07H021-00
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
            GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LR LS LT LU LV
            MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
            UA UG UZ VN YU ZA ZW
     AU 9936643      A  19991116 (200015)
     EP 1073668      A2 20010207 (200109)  EN        C07H021-00
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
            RO SE SI
     US 2002007048   A1 20020117 (200212)             C07G003-00
     US 2002016451   A1 20020207 (200213)             C07H021-04     <--
ADT  WO 9955718 A2 WO 1999-US8939 19990426; AU 9936643 A AU 1999-36643
     19990426; EP 1073668 A2 EP 1999-918819 19990426, WO 1999-US8939 19990426;
     US 2002007048 A1 Cont of US 1998-67337 19980427, US 2000-484484 20000118;
     US 2002016451 A1 US 1998-67337 19980427
FDT  AU 9936643 A Based on WO 9955718; EP 1073668 A2 Based on WO 9955718
PRAI US 1998-67337        19980427; US 2000-484484       20000118
IC   ICM  C07G003-00; C07H021-00; C07H021-04
     ICS  C07G011-00; C07H015-00; C07H017-00; C07H021-02; C07K001-00
AB   WO   9955718 A UPAB: 20000118
     NOVELTY - Liquid phase carrier (LPC) comprises a polyvalent group (Sp)
     with more than two points of attachment that carry reactive groups (X1)
     for synthesis of biopolymers.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
     following:
          (a) sequential solution phase synthesis of biopolymers on LPC; and
          (b) LPC coupled to biopolymers.
          ACTIVITY - None given.
          MECHANISM OF ACTION - None given.
          USE - LPC are used for solution-phase synthesis of peptides, peptide
     nucleic acids, oligosaccharides and particularly oligonucleotides,
     especially for therapeutic applications.
          ADVANTAGE - Solution-phase synthesis on LPC can provide (kilo)gram
```

scale quantities of biopolymers, with high purity and better yields than possible with known solution methods. LPC, and its reaction products formed during biopolymer synthesis, are soluble in the reaction medium and can be modified to have other advantageous properties such as compatibility with chromatography. The considerable difference in size between products and reagents makes possible purification by gel-permeation chromatography and products can be analyzed by mass spectrometry (of the fully protected material), allowing direct monitoring of the synthesis process.

Dwg. 0/0

FS CPI
FA AB; DCN
MC CPI: B06-H; B07-A02A; B07-D12; B07-H; B10-B01B; B10-C04; B10-E01; B10-E02; B10-E03; B10-E04; B10-F02; B10-G02; B11-C01; D05-H10

=> b home
FILE 'HOME' ENTERED AT 08:56:31 ON 06 MAY 2005

=>

```
=> d his full

     (FILE 'HOME' ENTERED AT 08:52:16 ON 06 MAY 2005)

     FILE 'HCAPLUS' ENTERED AT 08:54:56 ON 06 MAY 2005
L1             1 SEA ABB=ON  PLU=ON  US20020016451/PN

     FILE 'REGISTRY' ENTERED AT 08:55:34 ON 06 MAY 2005

     FILE 'HCAPLUS' ENTERED AT 08:55:36 ON 06 MAY 2005
L2             TRA L1 1- RN :        30 TERMS

     FILE 'REGISTRY' ENTERED AT 08:55:36 ON 06 MAY 2005
L3            30 SEA ABB=ON  PLU=ON  L2

     FILE 'WPIX' ENTERED AT 08:55:37 ON 06 MAY 2005
L4             1 SEA ABB=ON  PLU=ON  US20020016451/PN

     FILE 'REGISTRY' ENTERED AT 08:57:38 ON 06 MAY 2005
L5             0 SEA ABB=ON  PLU=ON  L3 AND SI/ELS

     FILE 'WPIX' ENTERED AT 09:47:27 ON 06 MAY 2005
L6        175304 SEA ABB=ON  PLU=ON  (B04-C01? OR C04-C01? OR B04-C02? OR
                 C04-C02? OR B04-E? OR C04-E? OR B04-B04A1 OR C04-B04A1 OR
                 B04-B04A6 OR C04-B04A6 OR N04-N02 OR C04-N02 OR D05-H12? OR
                 D05-C07 OR D05-C08 OR D05-C10)/MC
L7        191051 SEA ABB=ON  PLU=ON  ("L819" OR "L899" OR L82? OR V753 OR V752
                 OR V9?)/MO,M1,M2,M3,M4,M5,M6 OR (C07H OR C12P019 OR C07K001)/IP
                 C
L8         78950 SEA ABB=ON  PLU=ON  (B414 OR B514 OR B614 OR B743 OR B744)/MO,M
                 1,M2,M3,M4,M5,M6 OR E05-E?/MC OR (C07F007-08 OR C07F007-10 OR
                 C07F007-12)/IPC
L9          8020 SEA ABB=ON  PLU=ON  L8 (P)M730/MO,M1,M2,M3,M4,M5,M6
                 D TRI
                 D KWIC 1
L10           344 SEA ABB=ON  PLU=ON  (L6 OR L7) AND L9
L11        125377 SEA ABB=ON  PLU=ON  (D05-H12? OR D05-C07 OR D05-C08 OR
                 D05-C10)/MC OR (C07H OR C12P019 OR C07K001)/IPC
L12           120 SEA ABB=ON  PLU=ON  L9 AND L11
L13            32 SEA ABB=ON  PLU=ON  L12 NOT (PY>1998 OR AY>1998 OR AY>1998)
                 SEL AN 1 5 14-15 18 20 24 26 28-29
L14            10 SEA ABB=ON  PLU=ON  (1982-93528E/AN OR 1982-98880E/AN OR
                 1984-207518/AN OR 1985-315246/AN OR 1987-268284/AN OR 1988-1483
                 59/AN OR 1989-172729/AN OR 1989-221475/AN OR 1993-232351/AN OR
                 1997-316565/AN) AND L13
                 E KOSTER H/AU
L15            72 SEA ABB=ON  PLU=ON  ("KOSTER H"/AU OR "KOSTER H A M"/AU OR
                 "KOSTER H D"/AU OR "KOSTER H H"/AU OR "KOSTER H J"/AU OR
                 "KOSTER H W"/AU OR "KOSTER H W R"/AU)
                 E WORL R/AU
L16             2 SEA ABB=ON  PLU=ON  "WORL R"/AU
L17           234 SEA ABB=ON  PLU=ON  (KOSTER OR HK (1A) PHARM?)/CS,PA
                 D BIB
L18            38 SEA ABB=ON  PLU=ON  (L6 OR L7) AND (L15 OR L16 OR L17)
L19             4 SEA ABB=ON  PLU=ON  L18 AND (L8 OR L9)
L20             0 SEA ABB=ON  PLU=ON  L14 AND L19

=> b wpix
FILE 'WPIX' ENTERED AT 10:20:55 ON 06 MAY 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED:          4 MAY 2005      <20050504/UP>
MOST RECENT DERWENT UPDATE:     200528        <200528/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
```

http://thomsonderwent.com/coverage/latestupdates/ <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT:
http://thomsonderwent.com/support/userguides/ <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/
FOR DETAILS. <<<

=> d all l19 tot

L19 ANSWER 1 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2004-059185 [06] WPIX
CR 2004-756822 [74]
DNN N2004-047888 DNC C2004-024229
TI Collection of capture compounds capable of binding to biomolecules to form complexes that are stable under mass spectrometry conditions, useful for analysis of biomolecules, especially proteins.
DC A18 A21 A23 A89 B04 D16 P42 S03
IN **KOSTER, H**; LITTLE, D P; SIDDIQI, S; SHCHEPINOV, M S; KOESTER, H
PA (HKPH-N) **HK PHARM INC**; (KOST-I) **KOSTER H**; (LITT-I) LITTLE D P; (SIDD-I) SIDDIQI S; (KOES-I) KOESTER H
CYC 103
PI US 2003119021 A1 20030626 (200406)* 165 C12Q001-68
WO 2003077851 A2 20030925 (200406) EN A61K000-00
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
WO 2003092581 A2 20031113 (200406) EN A61K000-00
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
AU 2003224674 A1 20030929 (200432) C12Q001-68
AU 2002367839 A1 20031117 (200442) C12Q001-68
EP 1485707 A2 20041215 (200482) EN G01N031-00
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
EP 1502102 A2 20050202 (200510) EN G01N031-00
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
ADT US 2003119021 A1 Provisional US 2001-306019P 20010716, Provisional US 2001-314123P 20010821, Provisional US 2002-363433P 20020311, US 2002-197954 20020716; WO 2003077851 A2 WO 2003-US7479 20030311; WO 2003092581 A2 WO 2002-US22821 20020716; AU 2003224674 A1 AU 2003-224674 20030311; AU 2002367839 A1 AU 2002-367839 20020716; EP 1485707 A2 EP 2002-807357 20020716, WO 2002-US22821 20020716; EP 1502102 A2 EP 2003-721355 20030311, WO 2003-US7479 20030311
FDT AU 2003224674 A1 Based on WO 2003077851; AU 2002367839 A1 Based on WO 2003092581; EP 1485707 A2 Based on WO 2003092581; EP 1502102 A2 Based on WO 2003077851
PRAI US 2002-197954 20020716; US 2001-306019P 20010716;
US 2001-314123P 20010821; US 2002-363433P 20020311
IC ICM A61K000-00; C12Q001-68; G01N031-00
ICS B05D003-00; C07B061-00; **C07K001-04**; C12M001-34; G01N021-55; G01N033-53; G01N033-542; G01N033-543

AB US2003119021 A UPAB: 20050211
NOVELTY - A collection of capture compounds (I) capable of binding to biomolecules to form complexes that are stable under mass spectrometry conditions.
DETAILED DESCRIPTION - A collection of capture compounds comprises sets of compounds of formula (I)-(III):
X = a group that covalently binds to biomolecules to form complexes that are stable under mass spectrometry conditions;
Y' = a group that increases the selectivity of binding by X such that the capture compound binds to fewer biomolecules;
Q = a group that is different in each set and permits separation of each set;
Z' = a group for presenting X, Y and Q; and
m, n = 1-100.
INDEPENDENT CLAIMS are also included for:
(1) Analysis of biomolecules by contacting a composition comprising biomolecule with the above collection and identifying or detecting bound biomolecules;
(2) Separating protein conformers by contacting a composition comprising biomolecule with the above collection, separating the members of the collection and identifying bound proteins;
(3) Reducing diversity of a complex mixture of biomolecules by contacting the mixture with the above collection and separating each set of complexes of capture compounds with biomolecules from the other sets;
(4) Identifying phenotype-specific biomolecules by sorting cells from a single subject into sets according to a phenotype, contacting mixtures of biomolecules from each set with the above collection and comparing the patterns of biomolecule binding from each set;
(5) A collection of capture compounds as above except that X is different in each set and Q is absent; and
(6) A capture compound as above where Z' is a trivalent trityl group.
USE - The collection of capture compounds is useful for the analysis of biomolecules, especially proteins, using mass spectrometry, especially matrix assisted laser desorption ionization-time of flight (MALDI-TOF) mass spectrometry.
Dwg. 0/20
FS CPI EPI GMPI
FA AB; GI; DCN
MC CPI: A12-L04B; A12-V03C2; A12-W11L; B04-B03C; **B04-C01**; B04-G01; B04-G21; B04-G22; B04-N02; B04-N04; B04-N06; B06-F03; B11-C08A; B11-C08D; B11-C08F; B12-K04E; D05-H09; D05-H10
EPI: S03-E14H4

L19 ANSWER 2 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1989-070124 [10] WPIX
DNC C1989-031126
TI Membrane having bound protected nucleoside or aminoacid - used for synthesising oligo-nucleotide or peptide cpds. directly on the membrane.
DC A97 B04
IN COULL, J M; **KOSTER, H**; KOESTER, H
PA (MIFI) MILLIPORE CORP
CYC 8
PI EP 305929 A 19890308 (198910)* EN 21
R: DE FR GB IT NL SE
JP 01151596 A 19890614 (198930)
US 4923901 A 19900508 (199023)
EP 305929 B1 19960410 (199619) EN 25 C07K001-04 <--
R: DE FR GB
DE 3855191 G 19960515 (199625) C07K001-04 <--
ADT EP 305929 A EP 1988-113978 19880826; JP 01151596 A JP 1988-220577 19880905; US 4923901 A US 1987-93011 19870904; EP 305929 B1 EP 1988-113978 19880826; DE 3855191 G DE 1988-3855191 19880826, EP 1988-113978 19880826
FDT DE 3855191 G Based on EP 305929
PRAI US 1987-93011 19870904
REP A3...9113; No-SR.Pub; US 4757141; US 493474
IC **C07H019-04**; **C07H021-04**; **C07K001-04**; C07K017-06; C08G018-14; C12N011-02
ICM **C07K001-04**
ICS **C07H019-04**; **C07H021-04**; C07K017-06; C08G018-14; C12N011-02

AB EP 305929 A UPAB: 19930923
A modified membrane comprising a polymeric membrane having a protected nucleoside or amino acid linked to it is claimed.
Also claimed are (A) a modified membrane of formula P-X-Y-N-Z-SW (I) (P = a polymeric membrane; X = a functional gp. on the membrane; Y-N-Z = a linker in which N is a spacer molecule and Y and Z are functional gps., the linker being bound to the membrane through its functional gp. Y to X; SW = a protected nucleoside or amino acid); (B) a method of synthesising an oligonucleotide comprising (a) providing a modified membrane of formula (I) where SW is a protected nucleoside, (b) coupling a protected nucleoside phosphoramidite to the nucleoside SW to produce a membrane-bound nucleoside-nucleotide having a phosphite triester linkage, (c) oxidising to form a phosphate triester linkage and (d) sequentially coupling additional protected nucleoside phosphoramidite cpds. to the membrane-bound nucleoside-nucleotide and after each coupling step oxidising the resulting phosphite triester linkage to a phosphate triester to produce a membrane-bound polynucleotide; (C) a method of synthesising a peptide comprising (a) providing a modified membrane of formula (I) where SW is a protected amino acid and (b) sequentially coupling protected amino acids to SW to produce a membrane-bound peptide; (D) a membrane having an attached oligonucleotide or peptide of formula P-X-Y-N-Z-(SW)n (II) or P-X-Y-N-Z-(S)n (III) ((SW)n = an oligonucleotide or peptide comprised of protected or partly protected nucleotides or amino acids; n is the number of nucleotide or amino acid units; (S)n = an oligonucleotide or peptide).
USE/ADVANTAGE - The synthesised biopolmers can be cleaved off for subsequent characterisation and/or identification or left on the membrane in an unprotected form for the purificn. and detection of e.g. nucleic acids.
0/5
FS CPI
FA AB
MC CPI: A12-W11A; A12-W11L; B04-B03A; **B04-B04A1**; **B04-C01**; B04-C03

L19 ANSWER 3 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1985-062279 [10] WPIX
DNC C1985-027142
TI Solid phase oligonucleotide synthesis - using phosphine reactant protected by base eliminable gp..
DC B04
IN KOESTER, H; SINHA, N D
PA (KOST-I) **KOSTER H**; (MIFI) MILLIPORE CORP; (BIOS-N) BIOSYNTECH GMBH
CYC 16
PI WO 8500816 A 19850228 (198510)* GE 33
RW: AT BE CH DE FR GB LU NL SE
W: AU DK JP US
DE 3329892 A 19850307 (198511)
AU 8433137 A 19850312 (198523)
EP 152459 A 19850828 (198535) GE
R: AT BE CH DE FR GB LI LU NL SE
JP 60502102 W 19851205 (198604)
JP 62050479 B 19871024 (198746)
US 4725677 A 19880216 (198810)
CA 1234060 A 19880315 (198815)
EP 152459 B 19881102 (198844) GE
R: AT BE CH DE FR GB LI LU NL SE
DE 3474964 G 19881208 (198850)
JP 01301691 A 19891205 (199003)
IT 1198910 B 19881221 (199115)
JP 04011555 B 19920228 (199213) 11
US 34069 E 19920915 (199240) 14 C07H015-12 <--
US 34069 B1 19960123 (199610)# 3 C07H015-12 <--
ADT WO 8500816 A WO 1984-EP244 19840810; DE 3329892 A DE 1983-3329892 19830818; EP 152459 A EP 1984-903173 19840810; JP 60502102 W JP 1984-503282 19840810; JP 62050479 B JP 1989-23614 ; US 4725677 A US 1985-752178 19850618; JP 04011555 B JP 1989-23614 ; US 34069 E US 1985-752178 19850618, US 1990-481572 19900216; US 34069 B1 US 1985-752178 19850618, US 1990-481572 19900216
FDT US 34069 E Reissue of US 4725677

PRAI DE 1983-3329892 19830818
REP 3.Jnl.Ref; EP 40099; EP 61746; EP 90789
IC ICM **C07H015-12**
ICS C07F009-26; **C07H017-00**; **C07H019-04**; **C07H019-10**; **C07H021-00**; C07N000-00
AB WO 8500816 A UPAB: 19960308
Preparation of oligonucleotides of formula (I) comprises (1) reacting nucleoside (II) with phosphone (III), in presence of base, to form (IV) which is then (2) reacted with polymer-bound nucleoside (V) to give cpd. (VI). This is (3) oxidised to phosphotriester; (4) any unreacted, prim. 5'-OH gps. masked with a permanent protecting gp.; (5) gp. R2 is removed and (6) the sequence repeated as often as required. Finally (7) the nucleotide-polymer bond is split and opt. all protecting gps. removed.
B=nucleotide base; R1=H, OH or conventionally protected OH; n=1-200; R2=conventional protecting gp.; B'=protected B; T= polymeric carrier; R3=Z.CHY.CY2-; Each Y=H, Me or Et; Z=electron-withdrawing gp.; X=Cl, Br, CN or SCN; L=CN, SCN or -N(R4)2; R4=1-10C alkyl or together complete a 5-7C ring opt. containing 1 or 2 N, S or O; or are imidazole, triazole, tetrazole, 3-nitro-1,2,4-triazole, thiazole, pyrrole, benzotriazole or benzohydroxytriazole (the last 2 opt. substd. in the phenyl ring).
USE/ADVANTAGE - (I) are useful as specific primers and probes, and as intermediates in synthesis of complete genes. (IV) are very stable, can be prepared in pure form, are easily handled and very reactive in step (2). These R3 gps. can be eliminated with base, allowing removal of all protecting gps. (except 5'-trityl) in a single step with volatile base and purification of the prod. by reversed-phase h.p.l.c. During elimination of R3, no attack on the P atom occurs. Compared with known methods, this process gives a purer prod. in less time.
0/7
Dwg.0/7
FS CPI
FA AB
MC CPI: B04-B03; B04-B04A; B12-K04; N04-D01; N05-A

L19 ANSWER 4 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 1984-115021 [19] WPIX
DNC C1984-048425
TI Solid phase oligo-nucleoside phosphonate production - using nucleoside mono halo phosphinite as reactant.
DC B03 B04
PA (BIOS-N) BIOSYNTECH; (KOST-I) **KOSTER H**
CYC 12
PI DE 3239888 A 19840503 (198419)* 15
WO 8401778 A 19840510 (198420) GE
RW: AT BE CH DE FR GB LU NL SE
W: JP US
EP 124561 A 19841114 (198446) EN
R: AT BE CH DE FR GB LI LU NL SE
JP 59502025 W 19841206 (198504)
EP 124561 B 19890104 (198902) GE
R: AT BE CH DE FR GB LI LU NL SE
DE 3378829 G 19890209 (198907)
ADT DE 3239888 A DE 1982-3239888 19821028; WO 8401778 A WO 1983-EP280 19831027; EP 124561 A EP 1983-903507 19831027; JP 59502025 W JP 1983-503577 19831027
PRAI DE 1982-3239888 19821028
REP 2.Jnl.Ref
IC C07F009-40; **C07H021-04**; C12N015-00
AB DE 3239888 A UPAB: 19930925
Process comprises first reacting nucleoside (II) with halophosphine (III) in presence of organic base. The prod. (IV) is reacted with nucleoside (V) bound to a polymer carrier to give (VI). This is oxidised, the free 5'-hydroxy gp. is masked with a permanent protecting gp. and gp. A removed: Other nucleoside phosphonates or oligonucleoside phosphonates are added as required by repeating this sequence and finally the nucleoside released from the carrier and opt. all protecting gps. removed. (B is a nucleo-base, and B' its opt. conventionally protected analogue. R1 is 1-10C alkyl (opt. substd. by 1-4 chloro by one cyano); aryl or ar (1-2C) alkyl, opt. substd. by lower alkyl or alkoxy, cyano, halo or nitro. R2 is H or hydroxy, opt. conventionally protected. n is 2-50. A is a

conventional protecting gp. X is chloro or bromo. Z is chloro, bromo, (N(R1)2 or reactive heterocyclic residue. T is a polymeric carrier residue).

(I) are useful as lipophilic hybridisation analogues and can be incorporated into hydrophilic oligonucleotides to facilitate passage through cell membranes cpd. (IV), said to be new, reacts more rapidly than phosphonic acid monoester, but without loss of selectivity, so quickly provides high yield of (I).

0/0

FS CPI
FA AB
MC CPI: B04-B03; B04-B04A

=> d all tech abex l14 tot

L14 ANSWER 1 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1997-316565** [29] WPIX
DNC C1997-102128
TI Preparation of 2-deoxy-1-thioriboside compounds - comprises reacting 2-deoxyribose with alkyl- or aryl-mercaptane in presence of acid catalyst and organic solvent.
DC D17 E13
PA (NOGK) ZH NOGUCHI KENKYUSHO
CYC 1
PI JP 09124681 A 19970513 (199729)* 3 C07H015-14 <--
ADT JP 09124681 A JP 1995-306877 19951031
PRAI JP 1995-306877 19951031
IC ICM **C07H015-14**
ICS B01J027-10; B01J027-135; B01J031-08; B01J031-12; **C07H015-203**
ICA C07B061-00
AB JP 09124681 A UPAB: 19970716
Preparation of 2-deoxy-1-thioribosides of formula (I) or (II) comprises reacting 2-deoxyribose with aryl mercaptane or alkylmercaptane in the presence of an acid catalyst in an organic solvent. R = aryl or alkyl.

ADVANTAGE - The method is selective.

Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: D06-G; E07-A02D; E07-A02H; N03-B02; N04-D; N05-E01; N05-E03

L14 ANSWER 2 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1993-232351** [29] WPIX
DNC C1993-103425
TI Glycosyl derivative preparation - comprises reacting (substituted) alkyl or alkyl alcohol with specified alkyl or aryl glycoside in the presence of tri methyl silyl chloride.
DC B01 B03 B05
PA (DDSK-N) DDS KENKYUSHO KK
CYC 1
PI JP 05155894 A 19930622 (199329)* 16 C07H015-04 <--
JP 07110871 B2 19951129 (199601) 16 C07H015-04 <--
ADT JP 05155894 A JP 1991-324793 19911209; JP 07110871 B2 JP 1991-324793 19911209
FDT JP 07110871 B2 Based on JP 05155894
PRAI JP 1991-324793 19911209
IC ICM **C07H015-04**
ICS **C07H015-203**; C07J009-00; C07J017-00
AB JP 05155894 A UPAB: 19931116
Preparation of a glycosyl derivative comprises reacting an alcohol of the formula R-OH where R = opt. substituted alkyl or aryl, with an acyl glycoside or an alkyl or aryl glycoside of the formula (I) or WBOCOR' (II) W OCOR1 W B OCOR1 (I), W OR1 W B OR1 (II) where W = mono- or oligosaccharide; B = alpha and beta bond at the first position of the reductive terminal saccharide of the mono- or oligosaccharide; R1 = alkyl or aryl, to prepare a glycosyl derivative of the formula (IV): R2R3R4Si-X where R2, R3 and R4 = alkyl or aryl; X = halo, and a metal trifluoromethane sulphonate are used together as the activators for the reaction.

USE/ADVANTAGE - An acyl, alkyl or aryl glycoside can be specifically glycosylated under a specified mild condition.

In an example, 0.4 mmol of a cpd. of the formula (i) where X = OCOPh-pNO2, was reacted with 0.8 mmol of a cpd. of the formula: ROH, where R = a gp. (ii) in the presence of each 0.6 mmol of trimethylsilyl chloride and Zn(OTf)2 at 0 deg. C for 1 hr. under argon atmos. and then after-treated by a usual method and purified by a silica gel column chromatography to give a cpd. of the formula (iii) where alpha:beta = 55;45, yield 60%.
Dwg.0/0
FS CPI
FA AB; GI; DCN
MC CPI: B01-D02; B07-A02

L14 ANSWER 3 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1989-221475** [31] WPIX
DNC C1989-098377
TI Carrier of controlled pore size - for nucleic acid reactions by chemical or enzymatic methods, e.g. ligation or oligo-nucleotide synthesis.
DC A96 B04 D16 J04
IN GROGER, G; SELIGER, H H; GROEGER, G
PA (BOEF) BOEHRINGER MANNHEIM GMBH
CYC 20
PI DE 3801987 A 19890727 (198931)* 14
EP 325970 A 19890802 (198931) GE
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
AU 8928572 A 19890727 (198937)
NO 8900270 A 19890814 (198938)
DK 8900270 A 19890724 (198939)
ZA 8900284 A 19891025 (198947)
JP 02001499 A 19900105 (199007)
DD 278361 A 19900502 (199041)
EP 325970 B1 19930407 (199314) GE 18 C07H021-00 <--
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
DE 58903990 G 19930513 (199320) C07H021-00 <--
JP 06031310 B2 19940427 (199415) 11 C07H021-04 <--
ES 2054884 T3 19940816 (199434) C07H021-00 <--
ADT DE 3801987 A DE 1988-3801987 19880123; EP 325970 A EP 1989-100611 19890114; ZA 8900284 A ZA 1989-284 19890113; JP 02001499 A JP 1989-12052 19890123; EP 325970 B1 EP 1989-100611 19890114; DE 58903990 G DE 1989-503990 19890114, EP 1989-100611 19890114; JP 06031310 B2 JP 1989-12052 19890123; ES 2054884 T3 EP 1989-100611 19890114
FDT DE 58903990 G Based on EP 325970; JP 06031310 B2 Based on JP 02001499; ES 2054884 T3 Based on EP 325970
PRAI DE 1988-3801987 19880123
REP 2.Jnl.Ref; EP 35719; EP 90789; 1.Jnl.Ref
IC **C07H021-04**; C12M001-40; C12N011-12; C12N015-10; **C12P019-34**
AB DE 3801987 A UPAB: 19930923
Carrier for chemical and/or enzymatic reactions of nucleic acids (I), or their fragments, on a solid phase comprises an insoluble, non-swellable, porous polymer (A) to which one or more (I), or fragments, opt. protected by standard gps., are fixed. The new feature is that (A) has pores of size 140-1000nm.
(A) is glass of pore size 200-500nm, best controlled pore glass (CPG) of pore size 300nm, and (I) fragments are attached via an aminopropylsilyl (-Si-(CH2)3-NH-)spacer.
USE/ADVANTAGE - These carriers are resistant to reagents used in both chemical and enzymatic reactions for automated or manual nucleic acid synthesis, and reactions such as ligation or cleavage are achieved quickly and completely. The same carrier (which is of high mechanical stability and permanent porosity) can be used for all reactions, eliminating the need for transfer between carriers.
0/0
FS CPI
FA AB; DCN
MC CPI: A12-W11K; A12-W11L; B04-B04A1; **D05-H12**; J04-E03

L14 ANSWER 4 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1989-172729** [23] WPIX
CR 1987-110057 [16]
DNC C1989-076499

TI Netilmicin amino glycoside antibiotic production - from selectively blocked sisomycin derivative by conversion to 1-N-imino derivative then to ethylamino derivative.
DC B03
IN CHIU, J S; COLON, C; TANN, C H; THIRUVENGA, T K
PA (SCHE) SCHERING CORP
CYC 1
PI US 4831123 A 19890516 (198923)* 6
ADT US 4831123 A US 1986-927765 19861106
PRAI US 1985-787193 19851015; US 1986-927765 19861106
IC A61K031-71; C07D007-04; **C07H015-22**
AB US 4831123 A UPAB: 19940722
A process for the preparation of netilmicin (1-N-ethylsisomicin) comprises: (a) reacting acetaldehyde in an inert aprotic solvent under anhydrous conditions with a selectively blocked sisomicin derivative of formula (I) to form the corresp. 1-N-ethylidene derivative, (each X = SiR1R2R8; R1-R3 = lower alkyl, phenyl or phenyl-lower alkyl; X1 = H or SiR1R2R3; each Y = an amino blocking gp.; Y1 = H or an amino blocking gp). (b) reducing any excess of unreacted acetaldehyde present with a metal hydride reducing agent, (c) reducing the 1-N-ethylidene gp. to the ethylamino gp. under aqueous conditions with a metal hydride reducing agent by adjusting the pH to 7-12, (d) removing all protecting gps. by basic hydrolsis and (e) isolating netilmicin in free base form or in the form of an acid addition salt. The amino protecting gp. is e.g. acetyl, formyl, propionyl or aroyl. The aprotic solvent is e.g. 1,2-dimethoxyethane, hexane, CH2Cl2 or THF. The metal hydride reducing agent is e.g. NaBH4, amine borane or LiAlH4. Also claimed are selectively blocked sisomicin derivs. of formula (I) and (II).
USE/ADVANTAGE - Using the process yields of 85-90% or more of netilmicin are obtd. with about 3-7% unreacted sisomicin and negligible side reaction prods. The netilmicin is a well known aminoglycoside antibiotic (see e.g. US4337335).
Dwg.0/0
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B02-N; B02-S

L14 ANSWER 5 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1988-148359** [22] WPIX
CR 1988-161514 [23]
DNC C1988-066046
TI Ribofuranosyl-guanine and hypoxanthine derivs. - antiviral agents for treatment of aids and arc.
DC B03
IN ECKSTEIN, F; HARTMANN, H; HUNSMANN, G
PA (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN; (DEPR-N) DEUT PRIMATENZENTRUM GMBH
CYC 3
PI DE 3639780 A 19880526 (198822)* 6
JP 02500364 W 19900208 (199012)
IL 84550 A 19930708 (199335) A61K031-70
ADT DE 3639780 A DE 1986-3639780 19861121; JP 02500364 W JP 1987-506777 19871119; IL 84550 A IL 1987-84550 19871120
PRAI US 1987-41147 19870422; DE 1986-3639780 19861121; DE 1987-3708849 19870318
IC A61K031-70; **C07H019-17**
ICM A61K031-70
ICS **C07H019-17**
ICA **C07H019-16**
AB DE 3639780 A UPAB: 19931119
A pharmaceutical for the treatment of virus diseases which are caused by a virus which needs RNA-dependent DNA-polymerase for its multiplication, especially virus diseases caused by human immunodeficiency virus (HIV) contains, as the active ingredient, at least one guanine or hypoxanthine derivative of formula (I) or its pharmaceutically acceptable salt, together with conventional pharmaceutical carriers and diluents. B = guanine or hypoxanthine. X = azido, OMe or F. 3'-azido-2',3'-dideoxyguanosine is new.
USE/ADVANTAGE - (I) can be used in the treatment of AIDS and ARC, and the neurological complications associated with these.
Dwg.0/3

FS CPI
FA AB; DCN
MC CPI: B04-B03A; B12-A06

L14 ANSWER 6 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1987-268284** [38] WPIX
DNC C1987-113966
TI New 3'-O-thio benzoyl-2'-deoxy-beta-uridine derivs. - useful as intermediates for antitumour agents.
DC B03
PA (TAIH) TAIHO PHARM CO LTD
CYC 1
PI JP 62187483 A 19870815 (198738)* 9
JP 05029238 B 19930428 (199320) 8 C07H019-073 <--
ADT JP 62187483 A JP 1986-28408 19860212; JP 05029238 B JP 1986-28408 19860212
FDT JP 05029238 B Based on JP 62187483
PRAI JP 1986-28408 19860212
IC **C07H019-07**
ICM **C07H019-073**
ICS **C07H019-07**
AB JP 62187483 A UPAB: 19930922
3'-O-Thiobenzoyl-2'-deoxy-beta-uridine derivs. (I) are new, where R=trityl, lower acyl or monohaloqen-substd. benzoyl; X=halogen, lower alkyl or trifluoromethyl).
(I) can be prepared by condensing a 2-deoxy-3-)-thiobenzoyl-D-ribofuranose derivative (II) with a pyrimidine derivative (III), where Y=lower alkyl. The condensation is effected in a solvent in the presence of a catalyst. The solvent can be aprotic solvents such as benzene, ether, tetrahydrofuran, dioxan, methylene chloride, 1,2-dichloroethane, chloroform, acetone, acetonitrile or dimethylformamide. Catalysts are e.q. trimethyl-silyl trifluoromethanesulphonate and triethylsilyl trifluoro-methanesulphonate. The catalyst is used in 0.5-5 moles, (1-3) moles of (II). Pref. molar ratio of II:III is 1:0.5-2.
USE - (I)are useful as an intermediate for anti-tumour agents of formula.
FS CPI
FA AB; DCN
MC CPI: B04-B03A; N05-E01

L14 ANSWER 7 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1985-315246** [50] WPIX
DNC C1985-136379
TI New-fluoro-di desoxy-guanosine - exhibits high cytostatic activity and gives wide assortment of prod. acting on live organisms.
DC B02
IN KVASYUK, E I; MIKHAILOPU, I A; ZAITSEVA, G V
PA (DEAK) AKAD WISSENSCHAFTEN DDR; (ABBI-R) AS BELO BIOORG CHEM
CYC 1
PI SU 1053474 A 19850807 (198550)* 4
PRAI SU 1982-3456204 19820208
IC A61K031-70; **C07H019-16**
AB SU 1053474 A UPAB: 19930925
Cpd. of formula (I), is prepared by transglycosylation, involving reacting 5-O-acetyl-3'-fluoro- 2',3'-didesoxythymidine with derivs. of N2-palmitoylguanine by boiling in anhydrous acetonitrile in presence of trimethylsilyl ester of trifluoromethane-sulphonic acid as catalyst. The final prod. is separated out in crystalline form by ammonolysis (using NH3 in methanol) of the intermediate 9-/5-O-acetyl-3-fluoro -2,3-didesoxy-beta -D-ribofuranosyl -N2-palmitoylguanine.
Typically, the proposed reaction gives 81% yield of prod. (I). The deg. of inhibition (%) of multiplication of tumoral cells using prod. (I) and 3'-fluoro-2',3'-didesoxy- adenosine respectively is 7 and 0 using concentration 1 mkM; 46 and 64 at 6 mkM; 82 and 98 at 30 mkM; 100 and 100 at 50 mkM.
USE/ADVANTAGE - New cpd. exhibits high cytostatic activity for medical use, e.g. as highly effective antitumoural compsn. (e.g. surpassing activity of mercaptopurine by 50 fold). Bul.29/7.8.85
0/0
FS CPI
FA AB

MC CPI: B04-B03; B12-G07; N01-D

L14 ANSWER 8 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1984-207518** [34] WPIX
DNC C1984-087298
TI 3'-Fluoro-2',3'-di desoxy-guanosine - useful as anticancer and antiviral agent.
DC B02
IN KAND, D; KOWOLLIK, G; KVASJUK, E I; LANGEN, P; MIKHAILOPU, I A; SAIZEWA, G W
PA (DEAK) AKAD WISSENSCHAFTEN DDR
CYC 1
PI DD 209197 A 19840425 (198434)* 6
ADT DD 209197 A DD 1981-231961 19810721
PRAI DD 1981-231961 19810721
IC **C07H019-16**
AB DD 209197 A UPAB: 19930925
The new cpd. 3'-fluoro 2',3'-didesoxyguanosine of formula (I) is prepared by reacting 5'-O-acetyl-3'-fluoro 3'-desoxythymidine (II) with tris(trimethylsilyl) N2-palmitoylguanine (III) in MeCN in the presence of trimethylsilyl triflate (IV) as catalyst.
USE - (I) has antiviral and anticancer activity, e.g. giving 100% inhibition of Ehrlich ascites tumour cells in vitro at a concentration of 50 mcM. 0/0
FS CPI
FA AB
MC CPI: B04-B03; B12-A06; B12-G07; N01-D

L14 ANSWER 9 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1982-98880E** [46] WPIX
TI Glycocylidene acetal antibiotic preparation - by condensing aldonic acid lactone with tri methyl-silylated diol using tri methyl silyl tri fluoro-acetate.
DC B05
PA (YOSH-I) YOSHIMURA T
CYC 1
PI JP 57165388 A 19821012 (198246)* 5
JP 61050951 B 19861106 (198649)
ADT JP 57165388 A JP 1981-51506 19810406
PRAI JP 1981-51506 19810406
IC C07D311-00; C07D317-00; C07D493-10; **C07H015-18**; **C07H017-04**
AB JP 57165388 A UPAB: 19930915
Glycocylidene acetals may be produced by condensing aldonic acid lactone, whose hydroxy gp. is protected, with trimethylsilylated diols in solution using trimethylsilyl trifluroacetate as catalyst. Orthomycine antibiotic series are oligosaccharides such as Enaninomycin B, C, D, Furanbamycin, Curamycin or Abiramycin and aminoglycoside antibiotics such as Destrycin A, B, C, Hygromycin B, antibiotics A-396-1, SS-56C. They commonly contain aldonic acid lactone bonded by acetal bond with two-hydroxy gps. of another monosaccharide (spiro cyclic orthoester bond).
In an example, 2,3,4,6-tetra-O-benzyl -D-gluconic acid-1,5-lactone of formula (I) where (Bn is benzyl) and di-O-trimethyl silylethane diol were dissolved in dichloromethane, trimethylsilyl trifluoroacetate was added as catalyst into the solution in nitrogen stream at -10 deg.C and the resultant was stirred at room temperature for two hrs. Dry pyridine was added to neutralise the reaction solution and the mixture diluted with dichloromethane. The organic layer was washed with saturated NaHCO3 aqueous solution and water, dried and concentrate to give 1,2-O-(2,3,4,6- tetra-O- benzyl-D-glucopyranosylidene) ethanediol of formula (II).
FS CPI
FA AB
MC CPI: B02-O; B02-Z

L14 ANSWER 10 OF 10 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN **1982-93528E** [44] WPIX
TI Glycosylidene acetal antibiotics - obtd. by condensing tri methyl-silylated diol cpds. with arsinic acid lactone.
DC B03
PA (YOSH-I) YOSHIMURA T

CYC 1
PI JP 57154196 A 19820922 (198244)* 5
PRAI JP 1981-37477 19810316
IC C07D493-10; **C07H015-18**
AB JP 57154196 A UPAB: 19930915
Glycosylidene acetals are produced by condensing trimethylsilylated diols with ardinic acid lactone where OH is protected in solution using trimethylsilyl truflate as catalyst.
There are oligosaccharide antibiotics such as Evaninomycin B, C, D, Franbamycin, Clamycin, abiramycin, Amino glycoside antibiotics such as Destricin A, B, C, Hygromycin B, Antibiotics A-396-I, SS-56C in orthosomycin series of antibiotics. Among them, there are contained commonly new bonding style where lactone of ardonic acid is subjected to acetal bond with two hydroxy gps. of other monosaccharide.
FS CPI
FA AB
MC CPI: B02-Z; B07-A02; B07-A04; N05-E

=> b home
FILE 'HOME' ENTERED AT 10:21:25 ON 06 MAY 2005

=>